

ABOUT THE TAXONOMIC STATUS OF »*CHAMAECYTISUS DALMATICUS* VIS.« (FABACEAE)

IVO TRINAJSTIĆ

Prilaz Gjure Deželića 44, HR-10000 Zagreb, Croatia

Trinajstić, I.: About the taxonomic status of »*Chamaecytisus dalmaticus* Vis.« (Fabaceae). Nat. Croat., Vol. 10, No. 2, 83–88, 2001, Zagreb.

The discovery of a rich finding site, at the locality of Šušnjevača near Sinj, of the taxon designated by Visiani »*Chamaecytisus dalmaticus*«, and which inside the genus *Argyrolobium* is known by the name of *A. dalmaticum*, made possible the taxonomical revision of this species that is insufficiently known and dubious in floristic literature. Thus, the genus *Chamaecytisus* Vis., non Link has been renamed *Dalmatocytisus* Trinajstić, nom. nov. with a single stenoendemic species – *D. dalmaticus* Trinajstić, comb. nov.

Key words: *Dalmatocytisus* Trinajstić, nom. nov., *D. dalmaticus* Trinajstić, comb. nov., Flora of Croatia

Trinajstić, I.: O taksonomskom statusu »*Chamaecytisus dalmaticus* Vis.« (Fabaceae). Nat. Croat., Vol. 10, No. 2, 83–88, 2001, Zagreb.

Na lokalitetu Šušnjevača kod Sinja, otkrićem bogatog nalazišta onoga taksona koji je Visiani označi imenom »*Chamaecytisus dalmaticus*«, a koji je u opsegu roda *Argyrolobium* označen imenom *A. dalmaticum*, moglo se je pristupiti taksonomskoj reviziji te, u florističkoj literaturi nedovoljno poznate i dvojbene vrste. Rod *Chamaecytisus* Vis., non Link preimenovan je u *Dalmatocytisus* Trinajstić, nom. nov. s jednom stenoendemičnom vrstom – *D. dalmaticus* Trinajstić, comb. nov.

Ključne riječi: *Dalmatocytisus* Trinajstić, nom. nov., *D. dalmaticus* Trinajstić, comb. nov., flora Hrvatske

INTRODUCTION

In the very rich flora of Croatia there are many vascular plant taxa which were registered only once, most often in the 19th century, afterwards their original localities never having been reconfirmed. In many cases, such as the localities of *Salix herbacea*, *Loiseleuria procumbens* or *Ulex europeus*, it can be affirmed with a high degree of certainty that the species concerned are not members of the flora of Croatia.

Less frequent is the case in which some of the species described as being from Croatia have never been found or registered later, either in their »classical« locality (*locus classicus, typus*) or elsewhere. Such is the well-known case of the species *Dianthus multinervis* from the island of Jabuka, and according to the literature data (cf. ASCHERSON & GRAEBNER, 1907; HAYEK, 1926; BALL, 1968) this was also considered to be the case with the species *Argyrolobium dalmaticum* (= *Chamaecytisus dalmaticus* Vis.).

TAXONOMIC ISSUES OF »CHAMAECYTISUS DALMATICUS VIS.«

VISIANI (1851) on the basis of a relatively low-quality herbarium material collected by PETTER in the wider area of Sinj, described the separate genus *Chamaecytisus* Vis. to which he subordinated the one and only species *Ch. dalmaticus* Vis. indicating its locality as: »Hab. in saxosis apricis montis Beljak prope Prugovo, ditionis Sign, unde misit Prof. Petter.« (VISIANI, 1851: 272). The original herbarium material is kept in Padua (Hb PAD), in the »Visiani Herbarium of Dalmatian Flora« – »Erbario della flora Dalmata« di Visiani (cf. LORENZONI, 1983). The VISIANI genus *Chamaecytisus* could not endure as such because a short time earlier LINK had described another genus under the same name, into which, in more recent times (cf. HEYWOOD & FRODIN, 1968), many species originally described in the genus *Cytisus* have been included.

ASCHERSON & GRAEBNER (1907) were the first to warn that Visiani's species »*Chamaecytisus dalmaticus*« should be included in the genus *Argyrolobium*, saying: »Eine sehr kritische Pflanze, die eine mannigfache Würdigung erfahren hat, Bentham und Hooker (Gen. I. 481) vermuten in ihr einen abnormalen Zustand des *Argyrolobium Linnaeanum*, Reichenbach (a. a. O.), der von Visiani ein auf zweiterwähnten Tafel abgebildetes Bruchstück erhielt, erklärt sie für durchaus davon verschieden. Die Behaarung ist sehr kurz, nicht die grünen Theile deckend, den Kelch an Rücken ausgesackt, auch die langen gelgelte Fahne ist sehr auffällig. Wir wagen über die nicht wieder beobachtete Pflanze kein Urtheil, es ist nicht zu leugnen, dass die felschlagenden Staubblätter die Vergrößerung des Kelches, das eigenartige Auseinanderfahren der ungeöhnlich gebauten Blumenblätter der Gedanken an eine Monstruosität nahe lagen, andererseits ist dadurch das Verkahlen der Blätter etc., nicht zu erklären.« (ASCHERSON & GRAEBNER, 1907: 234–235). Such a point of view was also accepted by HAYEK (1926: 894) with the note »(Planta dubia)«, and finally by BALL (1968: 106) with the note »described from W. Jugoslavia, is a dubious species probably known only from the original collection. It has diadelphous stamens and is considered by some authors to be an abnormal plant of 1.«, namely of *Argyrolobium zanonii* (Turra) P. W. Ball.

From the above it can be concluded that during a century and a half VISIANI's »*Chamaecytisus dalmaticus*« had a dubious taxonomical status. The trouble was that the material available to scientists was very poor and, as already stressed, incomplete. Moreover, the locality »Beljak prope Prugovo in ditionis Sign« mentioned by VISIANI (1851: 272) could not be identified in the wider area of Sinj and this quotation is not clear. It most likely refers to the Šušnjevača mountain above Poljak ham-

let, not »Beljak«, today a part of the town of Sinj. There is no such name as »Prugovo« around Sinj. Prugovo village is located near Klis, by Split, but that is about 20 km distant from Sinj. »Beljak mountain« near Prugovo does not exist and it is not near Sinj.

Only recently, the VISIANI plant has been discovered in two localities, and that on the very outskirts of the town of Sinj, at the edge of a pine forest, and not far from this, in a locality on Šušnjevača Hill, where it is present in a large number of specimens (Fig. 1). This make it possible to collect abundant herbarium material, which then could be analysed in detail. Further to the above, we have come to the conclusion, like VISIANI, that the plant from the Sinj area really has to be put into a separate genus, as was done by VISIANI in his time (1851); Unfortunately, however, VISIANI chose a name (*Chamaecytisus*) that had been used before. We will try to correct this mistake by establishing a new name (nomen novum) of the genus, as follows:

Genus *Dalmatocytisus* Trinajstić, nom. nov.

- = *Chamaecytisus* Vis., Fl. Dalm. 3: 272 (1851), non Link, Handb. 2: 154 (1831)
- = *Argyrolobium* Ecklon et Zeyher, subsect. *Chamaecytisus* (Vis.) Ascherson et Graebner, Syn. Mitteleur. Fl. 6(2): 234 (1907)

Suffruticosa, pulviniformis bis tapetoidea. Folia caulina trifoliolata, petiolata. Flos unus, longe pedunculatus. Calyx distincte bilabiatus, tubo lobis multo breviore, basi saccato; labium superior bifidum, inferior 3-dentatum. Corolla sulfureo-flava. Vexillum magnum, longe unguiculatum. Stamina diadelphia, 9 in tubo coalita, unum liberum, tantum 5 fertilia. Legumen lineare, dehiscens.

Genus monotypicum in Dalmatia stenoendemicum, et nomine *Dalmatocytisus* dictum.

Type generis: *Dalmatocytisus dalmaticus* (Vis.) Trinajstić

***D. dalmaticus* (Vis.) Trinajstić, comb. nov.**

- Bas. = *Chamaecytisus dalmaticus* Vis., Fl. Dalm. 3: 272 (1851)
- Syn. = *Argyrolobium dalmaticum* (Vis.) Ascherson et Graebner, Syn. Mitteleur. Fl. 6(2): 234 (1907)

Diagnosis (emendata): Suffruticosa, pulviniformis bis tapetoides. Rhizoma repens, fibrosum, vel ± lignescens, multiramosum, caules plures fertiles et steriles emittens. Caules fertiles ad 10 cm alti, erecti, vel ± adscendententes, foliati. Caules steriles floriferis similes. Folia caulina (2-) 3(-4) trifoliolata, petiolata, foliolis oblongis, 2-3 cm longis et 10-12 mm latis, subtus ± appresse pilosis. Stipulae parvae, scariosae, setaceae deciduae. Flos unus (rarissime floribus binis), terminalis, 3-4 cm longus, longe pedunculatus. Pedunculus cca 3 cm longus, tenuis, apice articulatus et bracteollatus. Calyx ad 2 cm longus, appresse pilosus, profunde bilobus, tubo basi parum saccato, lobis multo breviore; lobus superior bidentatus, inferior tridentatus. Corolla sulfureo-flava, non raro etiam pallide purpurea, vel rosea. Vexillum magnum, transverse ellipticum, margine ± undulatum, in unguem longum cito attenuatum, calycem



Fig. 1. *Dalmatocytisus dalmaticus* (Vis.) Trinajstić – lectotypus (all stems originated from one individuum)

superans. Carina et aleae parvae ad 10 mm longae in calyce inclusae. Stamina 10, diadelphia, 9, basi in tubo coalita, unum liberum, tantum 5 fertilia. Antherae luteae, elipsoideae. Ovarium ad 10 mm longum, parce pilosum, stylus evolutus, stigma capitata. Legumen lineare, 4 cm longum et 4 mm latum pallidae bruneum, dehisces. Semina plura, parva, 1–2 mm longa, reniformia, ± compressa, atrofusca. Floret mensibus majo et iunio.

Typus: Šušnjevača prope Sinj in Dalmatia (Croatia).

Lectotypus in Hb Dr I. Trinajstić (ZA).

Fig. Visiani, Fl. Dalm. 3, Tab. LV f. 2 (1851), cf. etiam Fig. 1 in hoc loco (lectotypus).

Perennial procumbent, woody mat-forming rhizomes and ascending herbaceous flowering and non-flowering stems. Flowering stems usually with 3 leaves and a solitary flower on a long peduncle. Leaves 3-foliate, petiolate, leaflets 2–3 cm long and 10–12 mm wide, oblong, glabrous above, with appressed hairs beneath. Flowers 3–4 cm long. Calyx up to 2 cm long, appressed, hairy, deeply bilabiate, the lips much longer than the ± saccate tube; upper lip 2-fid; lower lip 3-toothed. Corolla pale yellow, rarely pale purple or pinkish; standard to 3 cm long, transverse elliptical on margin undulate with long claw, 2 times as long as calyx; others petals included in calyx. Stamens diadelphous, only 5 fertile. Legume 4 cm long and 4 mm wide, linear, pale brown, glabrous, dehiscent. Seeds 1–2 mm long, ± compressed ellipsoid, dark brown. Flowering from late May to June.

Received December 1, 2000

REFERENCES

- ASCHERSON, P. & GRAEBNER, P., 1906–1907: Synopsis der Mitteleuropäischen Flora 6(2). Leipzig.
- BALL, P. W., 1968: *Argyrolobium* Ecklon et Zeyher. In: TUTIN, T. G. & V. H. HEYWOOD (eds.): Flora Europaea 2, 106. Cambridge University Press.
- HAYEK, A., 1924–1927: Prodromus florae peninsulae Balcanicae 1. Berlin-Dahlem.
- HEYWOOD, V. H. & FRODIN, 1968: *Chamaecytisus* Link. In: TUTIN, T. G. & V. H. HEYWOOD (eds.): Flora Europaea 2, 90–93. Cambridge University Press.
- LORENZONI, G. G., 1983: VISIANI, R., 1850–1852: L'Erbario della Flora Dalmata di R. Visiani. Zbornik Roberta Visianija Šibenčanina. Povremena izdanja Muzeja grada Šibenika 10, 181–184.
- VISIANI, R., 1850–1852: Flora Dalmatica 3. Lipsiae.

S A Ž E T A K

O taksonomskom statusu vrste »*Chamacytisus dalmaticus* Vis.« (*Fabaceae*)

I. Trinajstić

VISIANI (1851) je na temelju razmjerno nekvalitetnog herbarskog materijala, koji je sabrao PETTER u širem području Sinja, opisao posebni rod *Chamaecytiosus* Vis. i podredio mu jedinu vrstu *Ch. dalmaticus* Vis. s oznakom njegova nalazišta: »Hab. in saxosis apricis montis Beljak prope Prugovo, ditionis Sign, unde misit Prof. Petter.« (VISIANI, 1851: 272). Originalni herbarski materijal pohranjen je u Padovi (Hb PAD) u »Visianijevom herbaru dalmatinske flore – »Erbario della flora Dalmata« di Visiani (usp. LORENZONI, 1983). VISIANIJEV rod *Chamaecytisus* nije se mogao održati, jer je nešto ranije LINK opisao pod istim imenom jedan drugi rod u koji je u novije vrijeme uvršten (usp. HEYWOOD & FRODIN, 1968) niz vrsta, prvo opisanih u sklopu roda *Cytisus*.

Tek je nedavno VISIANIJEVA biljka otkrivena na dva druga nalazišta i to u samom rubnom dijelu grada Sinja, uz rub jedne borove šume, te nedaleko od toga nalazišta i na brdu Šušnjevači, gdje je zastupljena u velikom broju primjeraka (sl. 1). Tako je mogao biti sakupljen obilan herbarski materijal, koji smo mogli pobliže analizirati. Slijedom navedenoga došli smo do zaključka da se, sukladno VISIANIJU, biljka iz područja Sinja zaista treba odvojiti u posebni rod, kako je to svojevremeno učinio i VISIANI (1851), ali nažalost odabравši već otprije upotrebljeno ime (*Chamaecytisus*). Navedeni propust pokušavamo riješiti postavljanjem novoga imena (nomen novum) roda *Dalmatocytisus* Trinajstić, nom. nov. i vrste *D. dalmaticus* (Vis.) Trinajstić, comb. nov.

D. dalmaticus s rodom *Argyrolobium* ima zajednički samo oblik čaške koja izrazito dvousnata, ali se od njega jasno razlikuje rasporedom prašnika, od kojih su 9 međusobno srasli u cijev, a jedan je slobodan, dok su kod roda *Argyrolobium* svi prašnici međusobno srasli u cijev.

S obzirom na kompletну morfologiju *D. dalmaticus* se potpuno razlikuje od svih europskih rodova porodice *Fabaceae*, a treba ga uvrstiti u tribus *Genisteae* i subtribus *Genistinae*.